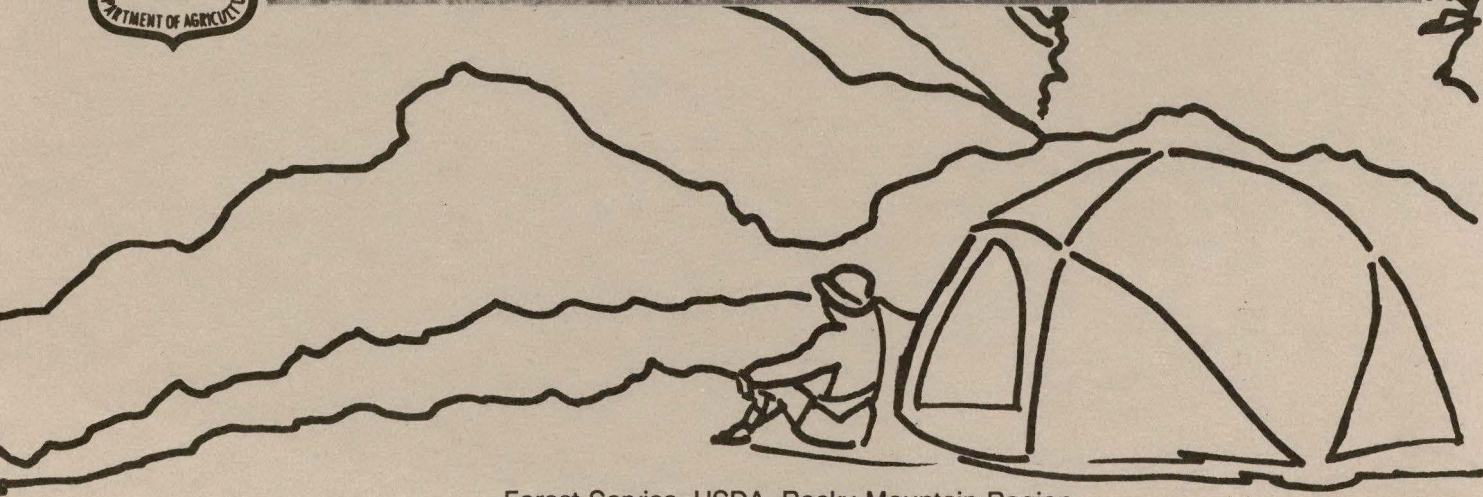


LAND MANAGEMENT CHALLENGES IN THE URBAN - FOREST INTERFACE

KEYNOTE ADDRESS TO THE COLORADO-WYOMING SOCIETY
OF THE SOCIETY OF AMERICAN FORESTERS

APRIL 13, 1988

H. BENJAMIN DUKE, JR.



Forest Service, USDA, Rocky Mountain Region

Dear Forest Service Employees, Society of American Foresters Members and Friends:

The Colorado-Wyoming Society of the SAF held the 1988 Annual Meeting in the Denver area. The Theme was *Land Management Challenges in the Urban-Forest Interface*. The meeting consisted of a Technical Session in Westminster, Colorado and a Field Trip to the South Platte River area of the Pike National Forest where participants were able to view the types of recreation which occurs outside of a large metropolitan area, the impacts of uses, and future impacts which may occur as domestic water projects are proposed.

The purpose was to inspire participants to develop and practice methods of managing the flora and fauna in Forest-Urban interface which is responsive to the changing public values and needs. Panelists reminded us of the extensive changes that have occurred in the past because of fire, insects and time. They also identified changing public needs and new opportunities that our forest lands in these areas can provide to society.

There were two panels at the Technical Session. They dealt with the natural resources situation, what has changed in the past few decades, how did we get where we are, what does the future hold, and what are the political, social and legal aspects?

Panelists included Stephen Mehls, historian; Ron Zeleny, Colorado State Forest Service; Jerry Groszold, President, Winter Park Resort; George VanDenBerg, Chairman, Colorado Wildlife Commission; Steve Humphries, Publisher of "High Country Times"; Bill Grannell, Colorado Counties, Inc.; Glen Haas, Chairman, Department of Outdoor Recreation and Landscape Architecture, Colorado State University; and Jerry Schmidt, Forest Supervisor, Routt National Forest.

The Keynote Speaker was Mr. H. Benjamin Duke, Jr. This publication of his Keynote address is of particular importance to Forest and Recreation managers in Colorado, Wyoming and other areas in the Nation because it reflects the importance that recreation has on the public lands, and how it relates to the other uses, particularly here in the Urban-Forest interface of the Rocky Mountain Region.

Mr. Duke's background made him especially well suited to present the Keynote Address. His activities include: Vice-Chairman of the Board and Past President; Gates Corporation; Past Chairman and Director, Vail Associates; Director, Colorado Ski Museum and Tenth Mountain Trail Association; Advisory Board, Volunteers for Outdoor Colorado; Director, National Association of Manufacturers, 1982-87; and Co-Chairman of the Governor's Task Force on Wildlife, 1982-87. He served in the 10th Mountain Division, U.S. Army, 1943-45 and is a member of numerous other business, recreation and community organizations.

COLORADO/WYOMING SECTION OF THE SOCIETY OF AMERICAN FORESTERS

H. Benjamin Duke, Jr.

It is quite intimidating to stand before this group, which administers and cares for the forests and public lands of the great states of Colorado and Wyoming. Considering that more than 1/3 of the 130 million acres that make up these states are owned by the public and managed by government agencies, the magnitude of your task is mind-boggling. The economic and aesthetic value of the land you manage is in the truest sense incalculable, and you daily face the unenviable task of reconciling the often conflicting views of a wide range of constituencies. But you do the job very well and despite our frequent and often bitter complaints, you have given us a public lands management system second to none.

I am therefore very humble as I stand here, particularly considering the expertise of the panelists from whom you will hear this afternoon, but I do draw comfort from the role of keynote speaker, since I'm expected to identify issues, leaving their resolution to better informed and wiser heads.

Peter has suggested that I try to provide some perspective on the importance of our natural resources to the public and business community, beyond the dollar and cents receipts from the sale or utilization of products.

In a literal sense, that's easy. In the five-state area, Colorado, Wyoming,

Kansas, Nebraska and South Dakota, total receipts for mineral, timber and livestock grazing from the National Forests, amounted to some \$59.1 million in 1987. To that can be added BLM mineral sales in Wyoming and Colorado of approximately \$300 million. Contrast those numbers to total tourist revenues for Colorado and Wyoming alone of \$6.2 billion in 1987. This revenue came for some 29.6 million tourists, most of whom came to visit the mountain areas of our states. They came for the scenery, for the skiing, or hunting, or fishing, camping, hiking, climbing, or for the variety of other recreational purposes. But whatever the activity, they came to see and be in contact with things in their natural state. The trees, rocks, plants, wildlife, snow and rivers--the things which make up our mountain and forest environment. So in tangible, specific terms, the recreational value was almost 20 times greater than the value of products sold or utilized, and of course that is only part of the story.

The fact is there's been a reduced overall demand for minerals, timber, and grazing, and an enormous increase in demand for water resource and recreation. This change, which must materially alter forest management priorities, results, I submit, from a number of secular trends which are rooted in basic changes in our industrial and social structure.

High Tech and More Leisure Time -

The irresistible move to a "high-tech" society in America, implies that our manufacturing base is being directed increasingly toward technologically advanced products like computers, aerospace hardware and communications equipment. That is obvious. But of greater importance for our consideration, American industry generally has become far more mechanized--automated if you like--which means that even the most basic industries, including my own, are today employing highly sophisticated, technologically advanced manufacturing methods. Only through the use of computer-aided design, computer integrated manufacturing, robotics and advanced communication systems, can manufacturers compete in today's global market which demands optimum cost and consistent quality. The use of these advanced technologies is effective, but capital intensive in the extreme. As a result, today's factories must be utilized fully if they are to pay out.

This means that for many industries a 7-day, 24-hour operation becomes the norm rather than the exception. The complications of the 7-day, 24-hour work schedule results in 4-day workweeks, or alternate workweeks, in which individual employees work more hours per day, fewer days per week. This in turn means that increasing numbers of people will have three days available each week, or perhaps four days every other week, for recreational purposes. This trend will accelerate dramatically over the next 10 years taxing fully our recre-

ational facilities. And the most rapidly increasing recreational activities will be those associated with the outdoors and the forests and lands you manage.

Change in Open Space - This morning, as I flew back to Denver from Atlanta and looked down from 40,000 feet, I was struck by the enormous amounts of open space in this country. Particularly here in the west. I was reminded of my first long distance airplane trip back in 1943, when I rode a B-25 from Chicago to Denver. On that trip we flew at 10-12,000 feet, but I recall having the same thoughts about the vastness of the open spaces of this great country. I wondered that so little had changed in my impression of openness in this country, despite the doubling of the population in the intervening 45 years. Then I thought of another incident on that trip 45 years ago. As we approached Denver and turned on the base leg approaching Lowry Field, the navigator pointed out Cherry Hills Country Club, where the 1938 National Open Golf Tournament had been played. I can still recall that patch of emerald green on a landscape which contained only prairie and wheat fields as far as the eye could see to the south and east of the course. Today, Cherry Hills is only a few miles south of the population center of the Denver metropolitan area, and I was reminded that America's openness, despite its doubled population, is a result of the dramatic urbanization which has occurred in all parts of the nation.

Changing Demographics - Urbanization and changing demographics have been a long-term trend in the United States, and nowhere is it more obvious than here in Colorado. Today, more than 70 percent of Colorado's population lives in the nine county area, extending from Pueblo to Fort Collins. The Colorado Department of Local Affairs has estimated that this distribution will remain fairly constant for the next 20 years. Recent developments, however, suggest that urbanization may actually increase during this time frame despite a slowing of population growth. There are two likely consequences: first, there will be an ever greater demand by urban dwellers for recreational facilities in our forests and public lands; and secondly, strong demand for development of urban outdoor facilities can be anticipated.

Furthermore, we are constantly reminded that our population, particularly here in Colorado, is aging--recent projections show that one out of every 10 Coloradans will be over 65 by the year 2010. This means there will be more people with more leisure time and more demand for recreational outlets. In addition, there is considerable evidence to indicate that the 65 year old in the future will be more mobile and far more active than his counterpart today.

Changes in Nature of Recreation - The nature of recreation that people seek also seems to be changing. More people are interested in active sports than ever before. Many of the sports are those which take place on-

ly in our forest and public lands. Downhill skiing in total may have leveled out in terms of participants. However, the Colorado/Wyoming area is receiving a disproportionate number of skier visits each year because of superior terrain and snow conditions. Cross country skiing is growing at a very rapid rate and promises to accelerate in the future. River rafting, both active and passive, is increasing wherever white water exists. And more and more people of all ages are engaged in hiking and camping. Even cross-country bicycling is a growing sport. Angling, both cold and warm water, shows continued growth and by most reports is the number one or two sports in the nation. Resident fishing license sales in Colorado have exceeded population growth, and today almost 20 percent of Colorado's total population buys resident fishing licenses. (An impressive number since children do not need licenses, nor do those residents over 62 who purchase lifetime licenses as a result of legislation largess.) Although resident hunting license sales have increased long term, recent trends are negative both for resident and non-resident big game hunters. This has ominous implications for the Colorado Division of Wildlife, which derives some 53 percent of its revenues from non-resident deer and elk hunters. However, on balance, it is clear that the interest in active forms of recreation is increasing.

At the same time, so is the interest in "non-consumptive" or passive wildlife usage. Today there are far more peo-

ple interested in the study and photography of animals, birds and plants than ever before. Perhaps this has been stimulated by the proliferation of television documentaries, but in any case a study conducted by the market research firm of Galloway, Vigil and Associates, for the Colorado Division of Wildlife in September 1986, showed the non-consumptive user to be the fastest growing segment of the wildlife constituency.

This same study highlighted another factor which has major implications for future management of our forests and public lands. Hunters, fishermen and non-consumptive users all rated the "quality" of the experience, not the result, as the most important element. This does not mean that hunters are happy to come home without game, or fishermen without fish, but rather that they are more interested in the quality of the surroundings and the opportunity to shoot trophy animals or catch larger fish. All hunters, fishermen, and non-consumptive users, were strongly motivated by the desire to be "close to nature." In fact, it was rated as the principle reason for engaging in the activity. It therefore seems logical that future land management priorities must focus upon the quality of the recreational experience, whether it be downhill skiing, hiking, bird watching, fishing, or hunting.

Water - Water resource management has always been a critical issue in Colorado and Wyoming. But management and enhancement of water resources will be an even more critical

matter in the future. Balancing requirements of the conservation and angling communities, with the need for irrigation and urban water supply, will require the wisdom of Solomon and the patience of Job. But there is no denying that for you engaged in land and forest management, the balancing of non-consumptive in-stream use, with agricultural and urban needs, will have top priority--there is no better example than the Two Forks Dam. It is also likely that you involved with the National Forest will be called upon to develop and put in effect management techniques which can increase water yields from existing watersheds.

Trends - Specifically then, present trends suggest you will be increasingly concerned with recreation as the principle use of our forests and public lands. Greater urbanization will place increased requirements on close-in facilities and will further encourage the development of urban projects in metropolitan areas. You will more and more be subjected to the same kind of tough quality requirements that consumers are forcing upon manufacturers and providers of service in our economy. Water will become the most important tangible resource, and it will certainly be a major area of controversy in the future. But in no way do these trends suggest that your role as protector and conservator of forest lands is diminished. To the contrary, never has the need for research and action to insure the health and quality of our forest lands been greater. However, changing demographics, changing lifestyles and

changing attitudes toward health and recreation, will thrust upon you the broadened, if unsought role of custodian and arbiter of the elusive but vital element in our existence, "quality of life." Elusive because each of us defines it differently; vital because without the quality elements we seek, life becomes a frustration.

Economic Development and Quality of Life - This "quality of life"/lifestyle factor has economic and well as social overtones. I am surprised there is very little public awareness of your role in regional economic development and economic well-being. It is often forgotten that businesses are simply a collection of individuals, and businesses are attracted to particular areas by the same things that attract tourists--climate, scenery, environment, recreation and all of the other factors that translate into "quality of life." Last month, Cray Research Corporation, manufacturer of the world's most complex and advanced computers, announced the purchase of a plant in Colorado Springs for the manufacture of a new generation of super computers. Cray listed as the critical reasons for its decision the availability of a technically skilled and highly educated work force, the presence of superior university-level engineering education and the "*quality of life*" in the Colorado Springs region, which would enable the company to attract and retain people best qualified for their sensitive operations. This is not an isolated incident and largely echoes the reasons given by such firms as IBM, Hewlett-Packard, East-

man Kodak, Honeywell and others who have chosen to locate facilities in the front range of Colorado.

Employee Needs and Corporate Decisions - From firsthand experience, I can give you the other side of the coin. Last year, for a variety of reasons, the Gates Corporation announced the consolidation of its advanced sealed lead acid battery business to a newer, more modern, plant in Warrensburg, Missouri. Our plan was to move many skilled employees to Warrensburg at our expense and facilities were set up both to assist employees in the disposition of real estate and houses here in Denver and the acquisition of housing in Warrensburg. While Warrensburg is an attractive college community located some 65 miles southeast of Kansas City, we were prepared for the fact that many employees would opt not to move because of their ties with Denver and Colorado. Despite this anticipation, we were disappointed that so few employees decided to make the move, even though they considered Gates to be an excellent employer. For the most part, employees opting not to make the transfer gave as the major reason the "quality of life" associated with Denver and Colorado. In my conversations with a number of employees, they constantly stressed the importance to them of the outdoor experiences available here in Colorado, focusing particularly on skiing fishing and camping in the mountains and forests of Colorado as critical quality of life ingredients.

Please don't misunderstand, I'm not suggesting that regional economic development is your responsibility. It isn't. However, the forests and lands which you manage, and the facilities they contain, are a *major* contributor to the desirability of the region for both businesses and employees.

If it is true that the primary objective of forest management has shifted from production of tangible resources and administration of commercial, mining, lumber and grazing programs to a broader role which emphasizes recreation and "quality of life" as well, what then are the issues now and for the future?

Issues Deserving Attention - By now it's painfully apparent to you that I'm not a professional in the field of forestry or resource management, but with the fearlessness that comes from ignorance, I'm going to barge ahead and give you what may be a somewhat different view of what the agenda for forest management may be, particularly within the framework of the urban/forest interface. I'll focus on five issues which in my opinion not only deserve your attention but may require some different ways of doing things.

First, there is the **quality** issue. As you exercise judgments on the quality of manufactured products, keep in mind that others are assessing, in an equally critical way, the quality of your product. Earlier I quoted the Galloway Vigil study, which was made for the Colorado Department of Wildlife in 1986. That study, which involved interviews

with a wide range of wildlife "users" in Colorado, found in every category--hunters, fishermen, bird watchers, sightseers, campers or hikers--the key ingredient was the quality of the experience. Hunters wanted not only better trophies but access to aesthetically pleasing places to hunt. Fishermen, as always, sought bigger fish but also rated at the top of their list the opportunity to fish "quality" waters. In other words, people increasingly seek quality and value in their recreational experience just as they do in the cars or blue jeans they buy.

Perhaps this is nowhere more visible than in Downhill skiing where the quality resorts, such as Aspen, Steamboat Springs, Vail and Winter Park that combine favorable terrain and good snow with superior grooming, snow making and effective operation, capture a disproportionate share of the local and destination skier market. The economics of Alpine skiing are very delicate as Jerry Groswald (President, Winter Park Resort) can, and probably will, tell you. It is *my* estimate, and I emphasize it is mine alone, that of an average effective lift ticket price of approximately \$22, about \$3.15 goes for enhancements such as slope grooming and snow making plus insurance, \$2.30 for fees and taxes, and about \$4.15 for depreciation, which in this industry is a very real cost because of the need for frequent equipment replacement. This is a total of \$9.60, leaving \$12.40 for all direct operating costs, administration, interest, income taxes and profit. As you know, earlier this winter predictions were that the industry in Col-

orado would lose 2-3 percent for the year. In the opinion of many, including myself, the worst thing that could happen to the industry would be a diminishment of quality, which would drive skiers to other regions or other activities. Therefore, there are some difficult and important decisions to be made in respect to expansion of existing areas vs. creation of new facilities, ticket prices, and fees and taxes, etc.

Second, **structure and organization** is an issue which faces all of us, whether our operations be public or private. The challenge is to be organized for current and future needs, not those of the past. It would be presumptive for me to comment or pass judgment on the structure of your organizations, but your business is like mine--it can stand continuous scrutiny, and we must guard against being perfectly organized in 1988 to solve 1987's problems. I offer for thought the comments Robert L. Herbst, the Executive Director of Trout Unlimited, made in 1986 to the National Capital Chapter of The Society of American Foresters, "You could look back at fiscal year 1985 and ask why the Forest Service, with more than 38,000 employees, has only 122 fisheries biologists and only 11 research fisheries biologists, and why only \$8 million out of a \$2 billion/year budget for the agency is used for fishery-related activities. Further, you can reflect that last September the Gallop Poll found angling to be our second most popular national recreational activity." (I'm afraid to ask what's No.2!) Sure, that comes from a special-interest spokesman, but it's a valid query. The

broader question is, given today's priorities are your organizations staffed and structured to provide the services and products your "customers" require and expect?

I've purposely stayed away from the issue of timber sales--particularly after the last issue of *Sports Illustrated*--because I know nothing about it. However, even the most rank outsider must ask, given the discrepancy between expenditures and revenues from timber sales, whether the policies make sense in today's world. It appears that the Forest Service is being forced into the role of social agency in the strange world of lumber sales. But I'll drop that one.

Third, there are a number of issues concerning **education--education and communication** about the perpetual forest resource--one of the few which can be used extensively but not depleted. Obviously there are the basic educational needs relating to things like avalanche danger and fire. But beyond this there is fundamental need for developing a broader public understanding of the value of this great resource and more particularly to develop a public feeling of ownership of our forests, because only through this sense of proprietorship can there be proper utilization and appropriate individual responsibility for maintenance. I have no idea how this should be done, but I've always been struck by the almost reverend appreciation people in Europe and Japan have for their forest resources and how carefully they use them. Perhaps

we have something to learn from their experience and history.

Fourth, and of great importance to this discussion, is the very broad and difficult question of **urban outreach from forest to city**. Sociologists tell us that all people need frequent and consistent contact with things in their natural state--that this contact with the trees and plants and rocks and animals and fishes in their natural environment is necessary to provide balance and stability in our lives. The fact is that many of our people, particularly in the inner cities, totally lack this opportunity. Increasing urbanization means that an ever larger segment of the population is growing up without ever seeing a concentration of trees, flowers or plants, let alone animals in their natural state.

Back in 1978, the National Urban Recreational Study commissioned by Congress in 1976 and conducted by the National Park Service concluded that the availability and proximity of outdoor facilities was a major national problem. Again, in 1987, the President's commission on "Americans and the Outdoors" reached the same conclusion. Both studies strongly emphasized the need for outdoor facilities close in to metropolitan areas, with inner city accessibility. Both strongly recommended the mobilization and coordination of federal, state and local agencies with the private sector, to effect changes.

In fact there has been progress in this regard here in Denver (which incidentally was one of the study areas in the

1978 report) with the South Platte Greenbelt project which has received not only critical acclaim, but unprecedented use. Another example is the Boulder Creek project in Boulder.

While Denver with its forward looking park system and proximity of the mountains is not comparable in terms of problems faced with such metropolitan areas as New York, Chicago, Cleveland, and Philadelphia, I am reminded each year how important to young people the outdoor experience is when the Boys Clubs of Denver operates its summer camp near Nederland. It is hard to believe how significant this brief experience is to inner city boys and the degree to which it impacts their attitudes and outlooks. Many, if not most, have never even seen a forest close up and to be actually in one is an adventure of real significance as is the incredible wonderment of seeing a deer in its natural environment.

But casting sentiment aside, there is critical need to deal with the urban/rural interface at its most basic level. In the final analysis, this involves bringing the forest and rural atmosphere closer to urban areas and in turn providing greater opportunity for access to the forest environment by inner city dwellers. The studies mentioned earlier outline in great detail the options. We all, as agency representatives, businessmen and citizens, must find workable solutions. Impossible? Within 15 miles of downtown Denver, there are thousands of acres of unused Federal lands, for example.

Finally, (let's get practical) is the issue of **funding**. It is quite unlikely that in the future Federal funding for agencies dealing with public lands will be increased. It is also, in my opinion, unlikely that revenues from minerals, timber and grazing will grow, in fact they are more likely to decline. The good news is the probability that recreational receipts will grow substantially, but the bad news is that so will the expenditures for enhanced facilities.

Given this somewhat bleak scenario, it would appear that more public-private partnerships are inevitable. As special interest constituencies will have to be brought into the funding loop. In this regard, the national partnership formed between Trout Unlimited and the Forest Service, for joint habitat improvement projects in the National Forest, is indeed a recreational milestone. It would seem appropriate that ways be found to forge similar alliances with other wildlife and conservation groups.

A major potential source of funding can come through the encouragement of properly conceived private projects on public lands. I note with great interest the proposal that KOA take over the construction and operation of a number of campsites on Forest Service property. With the proliferation of recreational vehicles of all types, this is an appropriate action and represents an innovative answer to an obviously major funding problem.

A different kind of approach to private funding is the 10th Mountain Trail System for cross country skiers. Over the past five years five huts have been built along a cross country trail system, which roughly connects Aspen to Vail. These huts, which have been built at a cost of almost \$400,000, have been fully funded from private resources and have endowment funds which, coupled with operating revenues, insures adequate financial resources for upkeep as well as operating expense. Hut use has grown from approximately 1,900 skier nights in the winter of 1983/84 to an estimated 8,500 this year. Funding exists for three more huts, and with forest service cooperation it will be possible to develop a cross country skiing experience rivaled only by the Haute Route in Europe.

Careful encouragement and nourishment of volunteerism is another approach to the funding problem. There exists, particularly in this region, an enormous sense of appreciation and pride in forests and mountains. It is worthwhile to find ways of nurturing this interest through cooperative efforts with organizations such as the Volunteers for Outdoor Colorado, which last year contributed some 6,000 volunteer hours to projects such as the Colorado Trail (*Pike and San Isabel National Forests*), handicap-access trails at Buffalo Creek (*Pike National Forest*), and the Pawnee Pass trail improvement (*Arapaho National Forest*). Searching out new and innovative ways to use this and other volunteer organizations ap-

pears to be a very productive use of time.

It is encouraging to note the greater cooperation between public lands, administrators and the conservation community. Enlisting the aid and support of these groups may not always be easy, but it is certainly worth the expenditure of time and ingenuity. The cooperation which exists between the Nature Conservancy and the Forest Service, here in Colorado resulted in the Ashcroft property near Aspen being included in the National Forest and facilitated the land exchange which made possible acquisition of the Mueller Ranch by the Colorado Division of Wildlife.

Getting Business Involvement - As we think about funding problems, it is worth considering how to develop increased business involvement in forest and public lands enhancement. There is a wide spread impression of estrangement between the business community and government in relation to public lands matters. Rightly or wrongly, many businessmen feel they take the rap for all environmental problems real or imagined. And, in fact, businesses do sometimes suffer from revisionist thinking and for example, get blamed for polluting with substances that were considered non-pollutants at the time of their use, while public agencies seem to have no culpability for such things as open

privies over the Eagle River. But these frictions notwithstanding it is my experience that businessmen generally are keenly interested in and willing to become involved in matters of forest and public lands' improvement--particularly in the area of recreational enhancement. The secret is to seek out their help and support early on, before the decisions are made, so that they have a real hand in the decision-making process just as they do in their business. Secondly, while financial support *may* be forthcoming, accept the fact that the support may more likely be in the form of broadened public awareness, legislative assistance, in-kind services, or new and challenging ideas.

Conclusion - These are but a few of the problems that we must confront today and in the future. None are easy and true to keynote tradition, I offer no solutions. But note that I said these are "problems we must confront," because you as administrators, professionals and practitioners cannot resolve these issues alone. You must have more constructive input and informed assistance from "us" the public generally, and from "us" the business community in particular. This may be your greatest challenge--and also your greatest opportunity to manage inevitable change with innovative and effective action.

